Serial No. 10/627,995

Attorney Docket No. 26L-001

## **LISTING OF CLAIMS:**

 (currently amended) A bio-liquid crystal polymer, comprising a polymer derived synthesized from an aromatic compound found in nature, wherein:

said derived polymer comprises an aromatic ring in a main chain,

said bio-liquid crystal polymer has a characteristic of liquid crystal under predetermined conditions and is biocompatible, and

said bio-liquid crystal polymer excludes a copolymer synthesized from an aliphatic hydroxy acid.

- 2. (original) The bio-liquid crystal polymer according to claim 1, wherein said bio-liquid crystal polymer has a solubility to a solvent.
- 3. (original) The bio-liquid crystal polymer according to claim 1, wherein said predetermined conditions include a temperature of said bio-liquid crystal polymer.
- 4. (currently amended) A bio-liquid crystal polymer, comprising a polymer derived synthesized from polyhydroxycinnamic acid, wherein:

said derived polymer comprises an aromatic ring in a main chain, and

said bio-liquid crystal polymer is biocompatible, and

said bio-liquid crystal polymer excludes a copolymer synthesized from an aliphatic hydroxy acid.

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5. (currently amended) A bio-liquid crystal polymer, comprising a copolymer which is synthesized by polymerizing two kinds of aromatic series compounds found in nature which have two or more reactive functional groups and are capable of polymerizing,

wherein said copolymer comprises an aromatic ring in a main chain, and

said bio-liquid crystal polymer excludes a copolymer synthesized from an aliphatic
hydroxy acid.

6. (previously presented) A bio-liquid crystal polymer, comprising a copolymer which is produced by polymerizing a) any one of aromatic series compounds found in nature which have two or more reactive functional groups and are capable of polymerizing and b) one or more selected from nucleic acids, amino acids, saccharides, fatty acids, terpenes, porphyrins, flavonoids, steroids and alkaloids which have two or more reactive functional groups and are capable of polymerizing,

wherein said copolymer comprises an aromatic ring in a main chain.

- 7. (canceled)
- 8. (currently amended) A bio-liquid crystal polymer, comprising a homopolymer which is produced synthesized by polymerizing an aromatic series compound found in nature which has two or more reactive functional groups and are capable of polymerizing,

wherein said homopolymer comprises an aromatic ring in a main chain, and said bio-liquid crystal polymer excludes a copolymer synthesized from an aliphatic hydroxy acid.

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9-10. (canceled)

- 11. (original) A bio-liquid crystal polymer, comprising a copolymer of hydroxycinnamic acid and lithocholic acid.
  - 12. (original) The bio-liquid crystal polymer according to claim 11, wherein: said bio-liquid crystal polymer includes lithocholic acid of 0 to 70 mol%.
  - 13. (original) The bio-liquid crystal polymer according to claim 11, wherein: said bio-liquid crystal polymer includes lithocholic acid of 0 to 30 mol%.
- 14. (original) A shaped material for biocompatible parts, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.
- 15. (original) A shaped material for parts requiring mechanical strength and thermal resistance, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.
- 16. (original) A shaped material for fibers, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.
- 17. (original) A shaped material for optical parts having an optical characteristic to be changed by light irradiation or heating, comprising a copolymer of hydroxycinnamic acid and lithocholic acid or polyhydroxycinnamic acid.

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